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(71) Applicant (for all designated States except US): SHELL OIL COMPANY [US/US]; Department of Intellectual Property, One Shell Plaza, P.O. Box 2463, Houston, TX 77252-2463 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): DEWITZ, Thomas, Shawn [US/US]; 4613 Valerie Street, Bellaire, TX 77401 (US). DRIES, Hubertus, Wilhelmus, Albertus [NL/NL]; Badhuisweg 3, NL-1031 CM Amsterdam (NL). EKKER, Andreas [NL/NL]; Badhuisweg 3, NL-1031 CM Amsterdam (NL). KATER, Jan [NL/NL]; Badhuisweg 3, NL-1031 CM Amsterdam (NL). SANBORN, Richard, Addison [US/US]; 12418 Mossycup Drive, Houston, TX 77024 (US). (74) Agent: STEWART, Charles, W.; Shell Oil Company, One Shell Plaza, P.O. Box 2463, Houston, TX 77252-2463 (US).

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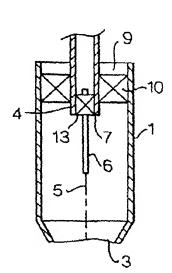
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(54) Title: CYCLONE SEPARATOR WITH A VORTEX EXTENDER PIN



57) Abstract: Swirl tube separator for separating solids from a gas-solid containing feed comprising a tubular housing, an inlet for introducing a gas-solids mixture at one end of said housing, a solids outlet opening at the opposite end of said housing, and a co-axial positioned tubular gas outlet conduit placed at an end of said housing, wherein along the axis of the tubular housing a vortex extender pin is present.

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